



April 30, 2019

CERTIFIED MAIL: 7018 0680 0000 1036 0550
RETURN RECEIPT REQUESTED

Chief, Air and TRI Section
Enforcement Division
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, California 94105

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Director, Air Enforcement Division
Office of Civil Enforcement
U.S. EPA Headquarters, MC 2242A
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

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Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-10459

Re: United States v. Asarco
Consent Decree No. CV-15-02206-PHX-DLR
Quarterly Report for the First Quarter of 2019

Presented below is Asarco's quarterly report for the first quarter of 2019, as required by paragraphs 55 and B.36 of the above-referenced Consent Decree. Consent Decree reporting requirements are in bold italics followed by the required report information.

Paragraph 55.a.i: Emissions and monitoring data and corrective action records, including the following:

(1) The results of any performance tests that were required by the Consent Decree;

Smelter Method 5 Performance Tests:

No Method 5 performance testing was conducted during the first quarter of 2019.

Smelter Method 5B Performance Tests:

No Method 5B performance testing was conducted during the first quarter of 2019.

Concentrator Method 5 Performance Tests:

No Method 5 performance testing was conducted during the first quarter of 2019.

Flash Furnace, Converter, and Anode Buildings Opacity Performance Tests:

The due date for the submittal of a performance test plan per 40 C.F.R. § 63.1450(c) is 60 days after the completion of the converter retrofit project (CRP). The CRP was completed on November 30, 2018 and the initial converter aisle opacity performance test protocol was submitted to EPA for approval on December 18, 2018.

- (2) Copies of any Visible Emissions evaluations or records for which opacity was 4 percent or greater for the building housing the flash furnace, converters, and anode furnaces (to include date, time, and duration of the opacity);**
- (3) A description of any corrective actions taken to address the opacity from the building housing the flash furnace, converters, and anode furnaces (to include the date and time such actions were commenced and completed), along with a description of the cause of the opacity;**

Exceedance(s) of 4% opacity limit applicable to visible emissions from the flash furnace, anode furnaces, and converter and not yet superseded by requirements related to the installation of the long-path optical density monitors:

N/A. Dependent upon CRP completion and initial fugitive emissions study.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and initial fugitive emissions study.

- (4) Dates, times, and duration of each bag leak detection system alarm sounding, the cause of the alarm and the date and time that ASARCO commenced investigation of the baghouse, and a description of the corrective actions taken, if any, along with the date and time such corrective actions were completed;**
- (5) The total alarm time for each bag leak detection system, as determined in accordance with subparagraph 26.a.v;**

Total alarm time for each bag leak detection system:

See excel file titled "1Q2019 Bag Leak Alarms" on enclosed compact disk.

Exceedance(s) of alarm limit of no more than 5% of total operating time in any 6-month period:

<i>Secondary Hood Baghouse: October 1, 2018 – March 31, 2019</i>	
Total duration of bag leak detection system alarm hours	22.37
Total hours of source operation	3816
Percent of time in alarm (operating hours)	0.013%

<i>Anode Baghouse: October 1, 2018 – March 31, 2019</i>	
Total duration of bag leak detection system alarm hours	5.35
Total hours of source operation	3816
Percent of time in alarm (operating hours)	0.00%

<i>Furnace Vent Baghouse: October 1, 2018 – March 31, 2019</i>	
Total duration of bag leak detection system alarm hours	0.00
Total hours of source operation	3816
Percent of time in alarm (operating hours)	0.00%

Note: The Hayden Smelter was down from October 22, 2018 through October 25, 2018 and December 6, 2018 through December 20, 2018 for unexpected maintenance activities. The Hayden Smelter was down from February 6, 2019 through February 10, 2019 for unexpected maintenance activities. No processing equipment was operating during any of these time periods.

Investigation(s), cause(s) and corrective action(s) taken:

See excel file titled "1Q2019 Bag Leak Alarms" on enclosed compact disk.

Dates, times, and duration of any instances where pressure drop or scrubber liquid flow rates were outside the established ranges for those parameters, the date and time that ASARCO initiated investigation, the readings at the time of the issue, a description of the underlying cause for those readings, and a description and explanation of any corrective actions, including the date and time that such actions were commenced and completed;

Hourly (block) average pressure drop(s) and liquid flow rate(s) outside range established in most recent Method 5 test:

The hourly block averages outside the established range(s) are detailed in the enclosed compact disk.

Investigation(s), cause(s) and corrective action(s) taken:

The investigation(s), cause(s) and corrective action(s) taken for each event are detailed in the enclosed compact disk.

Times scrubber(s) not in service or believed to be malfunctioning:

The times that the scrubber(s) were not in service or believed to be malfunctioning are detailed in the enclosed compact disk.

(6) *Dates, times, and descriptions of deviations from the gas capture parametric monitoring requirements and/or limits of Paragraph 9;*

PRIMARY HOODING PARAMETER:

Failure(s) to achieve minimum air infiltration ratio of 1:1 during blowing when improved hood is operational averaged over 24 blowing hours rolled hourly:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

SECONDARY HOODING PARAMETER DURING BLOWING:

Failure(s) to achieve minimum exhaust rate of 35,000 SCFM at a converter averaged over 24 blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

SECONDARY HOODING PARAMETER DURING NON-BLOWING:

Failure(s) to achieve minimum exhaust rate of 133,000 SCFM at a converter averaged over 24 non-blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

SECONDARY HOODING PARAMETER WHEN HOOD DOORS ARE CLOSED:

Failure(s) to achieve minimum negative pressure drop across a hood of 0.03 mm of Hg (0.007 inches of water), unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

TERTIARY HOODING PARAMETER AT ALL TIMES MATERIAL IS PROCESSED IN COPPER CONVERTER DEPARTMENT:

Failure(s) to achieve minimum exhaust rate of 400,000 ACFM averaged over 24 hours of copper converter department material processing rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

(7) Dates, times, and descriptions of deviations when ASARCO operated the furnaces, capture systems, baghouses, R&R Cottrell, or any other equipment in a manner inconsistent with the approved Operations and Maintenance Plan;

N/A. On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018. On October 18, 2018 EPA notified Asarco that it was disapproving the submitted O&M Plans. Asarco has requested a meeting or conference call to discuss this disapproval with EPA and the conference call was scheduled for April 2, 2019.

(8) Dates, times, and descriptions of deviations when ASARCO's material handling was carried out in a manner inconsistent with the approved Operations and Maintenance Plan and/or Fugitive Dust Plan;

OPERATION AND MAINTENANCE PLAN

On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal

package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018. On October 18, 2018 Asarco received a notice of disapproval of the previously submitted O&M Plans from EPA. Asarco has requested a meeting or conference call to discuss this disapproval with EPA and that conference call was scheduled for April 2, 2019.

FUGITIVE DUST CONTROL PLAN

Asarco submitted the Soil and Vegetation Cover Plans for the three inactive facilities to EPA on October 15, 2018. Two facilities are also facilities permitted under the Hayden Operation's Aquifer Protection Permit No. 100507 and those Soil Cover and Vegetation Plans were submitted to ADEQ for review on October 26, 2018. On March 28, 2019 Asarco received EPA's comments on the Kennecott Avenue Historic Tailings Closure Project and is working with AJAX to address those comments and submit a revised plan to EPA.

Deviation(s) from material handling requirements of approved fugitive dust control plan and corrective action(s) taken:

See enclosed pdf titled "Fugitive Dust Plan Corrective Action 1Q2019."

Exceedance(s) of 15% Method 9 opacity limit on visible emissions from any source listed in the approved fugitive dust control plan (i.e., sources other than the furnaces and converter building) and corrective action(s) taken:

None during the first quarter of 2019.

Opacity readings outside major openings of secondary and tertiary crushers Total Enclosure or fine ore storage building in excess of minimum measurable opacity level over 6-minute period using long-path optical density monitors and corrective action(s) taken:

The open path opacity monitors were installed on August 10, 2018 at all four locations and the initial calibration was completed on August 14, 2018. On August 20, 2018 all four monitors were connected to the DCS. On August 20, 2018 instrument technicians checked the monitors located on both ends of the fine ore storage building as the monitors were not reading correctly due to alignment issues. Contractors were also in the process of adding bracing brackets to the instrument mounts to fix the alignment issues.

Since the mounting bracket was fixed, the opacity monitors located at the fine ore storage building were still not measuring correctly. In September it was realized that direct sunlight was interfering with the monitor's measurements at the fine ore buildings. A shade cover was later installed to remedy interferences with sunlight. After this modification the two monitors at the fine ore storage building were still coming out of alignment every day. After further investigation it was discovered that as the fine ore storage building's structure shifted throughout the day due to heat, vibration etc., the monitors would come out of alignment giving false readings. A new mounting system that would not be connected to the fine ore building was designed and the construction was bid out in November 2018. 5D Mining & Construction was chosen to carry out this project and a purchase order was generated on December 4, 2018. The new mounting configuration for the south entrance was completed on January 21, 2019 and the 120-day shakedown period began. If this new mounting system works for the south entrance, then the north entrance's mounting system will be upgraded in a similar manor.

On December 11, 2018 Asarco submitted the notification to establish opacity monitor corrective action levels for the two monitors located at the secondary crusher building. On March 21, 2019 Asarco received comments from EPA regarding the crusher building's opacity monitor trigger levels and is in the process of addressing those comments.

Event(s) when DCS system recorded data outside of established operational parameters, investigation(s), cause(s), corrective action(s), and degree of success:

Water Spray Systems Operational Parameters: The water spray systems' flow rate and pressure are recorded by the DCS. Times when the water spray systems' flow rate and pressure were below range are included in the pdf titled "Fugitive Dust Plan Corrective Action 1Q2019."

Camera Hill Meteorological Station Data & High Wind Events: See Excel spreadsheet titled "High Wind Events 1Q2019" which is enclosed with this report on a compact disc.

Acid Plant Scrubber Blowdown Solids Electric Dryer start/stop times: Currently being recorded in the DCS per fugitive dust plan requirements.

Concentrator Scrubber Parameters & Operational Run Times: See enclosed scrubber alarm report for the first quarter of 2019.

Refractory Brick Crusher Operational Parameters: The refractory brick crusher did not operate during the first quarter of 2019.

Dates and times when DCS system was not recording data:

The open path opacity monitors were installed on August 10, 2018 at all four locations and the initial calibration was completed on August 14, 2018. On August 20, 2018 all four monitors were connected to the DCS. On August 20, 2018 instrument technicians checked the monitors located on both ends of the fine ore storage building as the monitors were not reading correctly due to alignment issues. Contractors were also in the process of adding bracing brackets to the instrument mounts to fix the alignment issues.

Since the mounting bracket was fixed, the opacity monitors located at the fine ore storage building were still not measuring correctly. In September it was realized that direct sunlight was interfering with the monitor's measurements at the fine ore buildings. A shade cover was later installed to remedy interferences with sunlight. After this modification the two monitors at the fine ore storage building were still coming out of alignment every day. After further investigation it was discovered that as the fine ore storage building's structure shifted throughout the day due to heat, vibration etc., the monitors would come out of alignment giving false readings. A new mounting system for the south entrance that would not be connected to the fine ore building was designed and the construction was bid out in November 2018. 5D Mining & Construction was chosen to carry out this project and a purchase order was generated on December 4, 2018. The project was completed on January 21, 2019 and the 120-day shakedown period for the south fine ore storage building began. If the new mounting system works then the north entrance mounting system will be retrofitted in a similar fashion to the south entrance mounting system.

AMBIENT MONITORING NETWORK

Ambient monitoring network raw data and calculated ambient levels for the first quarter of 2019 are enclosed with this report on a compact disc.

On January 8 and 22, February 5 and 19, and March 6 and 20, Asarco submitted notifications of apparent exceedances of some trigger levels at several ambient stations. Asarco commenced investigating of these events and submitted the corresponding 60-day reports to EPA as required on January 25, 2019, February 15, 2019, March 8 and 22, 2019.

(9) *Dates, times, and descriptions (including emissions data) of any periods where ASARCO failed to meet an emission limit or an emissions control efficiency established under this Consent Decree;*

ACID PLANT PM EMISSION LIMIT

Exceedance(s) of 6.2 mg/dscm limit as demonstrated through performance testing:
None

SECONDARY HOOD BAGHOUSE EMISSION LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

ANODE FURNACE BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

FURNACE VENT BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

COPPER CONCENTRATE DRYER PM EMISSIONS LIMIT

The copper concentrate dryer emissions are routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

FLASH FURNACE TAPPING/SKIMMING EMISSIONS CAPTURE SYSTEM PM EMISSIONS LIMIT

The flash furnace tapping/skimming emissions capture system is routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

PROCESS-WIDE TOTAL PM EMISSIONS LIMIT

The due date for beginning the use of a measuring system described in paragraph 24.a of the decree is June 1, 2019.

Exceedances of 0.6 lb PM per ton of concentrate smelted total PM limit(s):

N/A. Not applicable until December 1, 2019.

Investigation(s), causes(s) and corrective action(s) taken:

N/A. Not applicable until December 1, 2019.

DUCON-TYPE WET SCRUBBER OPERATIONAL REQUIREMENTS

Exceedance(s) of 0.05 g/dscm limit: None

DRY LIME SCRUBBING OF SO₂ ROUTED TO SECONDARY HOOD AND FURNACE VENT BAGHOUSES

Failure(s) to meet applicable control efficiency:

N/A. Dependent upon CRP completion and 365-days of operation.

Investigation(s), cause(s) and corrective action(s) taken or status of demonstration of technical infeasibility of control efficiency:

N/A. Dependent upon CRP completion and 365-days of operation.

CORRECTIVE ACTION TRIGGERS FOR ACID PLANT

Date	Time of Trigger Level Alarm	Cause and Corrective Actions Taken if Necessary
		None during the first quarter of 2019.

SO₂ EMISSIONS LIMIT FOR GASES COLLECTED FROM THE CONVERTERS

Exceedance(s) of applicable 650 ppmv limit for gases routed to acid plant or secondary hood baghouse or gases in the tertiary hood exhaust:

No exceedances of the 650 ppmv limit on the acid plant tail gas, secondary hood baghouse or the tertiary ventilation system occurred during the first quarter of 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A.

(10) Dates, times and descriptions where ASARCO exceeded the Blowing rate limit set forth in Paragraph 8 and/or, for such time as the Blowing hour limit in Paragraph 8.b remains applicable, the Blowing hour limit;

Exceedance(s) of converter blowing limit of 32,000 SCFM averaged over 5 minutes of blowing and rolled each minute:

Date	Time	Converter Number	Cause
			None

TOTAL COMBINED BLOWING TIME OR SO₂ LIMIT ON ACID PLANT TAIL GAS

Exceedance(s) of total combined blowing time limit at all converters of 21 hours per 24-hour period rolled hourly, unless Asarco accepts 100 ppmv SO₂ limit on acid plant tail gas:

None

Investigation(s), cause(s) and corrective action(s) taken:

N/A

ii. Status and/or completion of construction or compliance milestones;

CONVERTER RETROFIT PROJECT

Completed.

R&R COTTRELL ESP REPLACEMENT BAGHOUSE

Completed.

DRY LIME SCRUBBING OF SO₂ ROUTED TO BAGHOUSES

Completed.

PREPARATION OF FUGITIVE EMISSIONS STUDY PROTOCOL

Completed.

IMPLEMENTATION OF APPROVED FUGITIVE EMISSIONS STUDY PROTOCOL

Asarco continued to order the equipment needed for the fugitive emissions study during the first quarter of 2019. Upon receipt of equipment, SLR verified the equipment's functionality. See memorandum titled "Fugitive Emission Study Siting Confirmation Survey Memo" for the Infrared Camera Survey that was conducted during the week of March 4th on the enclosed compact disk.

LONG-PATH OPTICAL DENSITY MONITORS SPECIFIED IN PROTOCOL

The due date for the installation of the three long-path optical density monitors at the building emission points specified in the fugitive emissions study protocol is 6 months after the completion of the initial fugitive emissions study.

iii. Status of PM CEMS installation and PS-11 testing pursuant to Paragraph 14;

On August 28, 2018 Asarco submitted the PS11 re-test report to EPA and informed that the Acid Plant beta-attenuation PM CEM did not certify the second attempt at PS11 correlation testing. On November 16, 2018, Asarco submitted the Alternative PM Monitoring Plan to EPA to utilize this monitor as a continuous parametric monitoring system (CPMS). On March 1, 2019 Asarco received comments from EPA regarding the submitted Acid Plant Alternative Monitoring Plan and is in the process of incorporated those comments in a revised plan.

iv. Problems encountered or anticipated with Consent Decree compliance, together with implemented or proposed solutions;

None

v. Status of any permit applications pertaining to any of the requirements of this Consent Decree;

Completed.

vi. The status of the SEP under Section VIII and Appendix C including, at a minimum, a narrative description of activities undertaken; and

On March 13, 2018 an order was placed for the new diesel-electric switch locomotive. On May 31, 2018 the new diesel electric switch locomotive was delivered on-site. The old switch locomotive was scrapped and shipped off-site on December 26, 2018. The SEP is now complete and Asarco submitted the final SEP Project Report on January 14, 2019. On March 11, 2019 Asarco received comments from EPA concerning the SEP Project Report and is in the process of revising the report and incorporating EPA's comments.

vii. The status of the Environmental Mitigation Projects under Section VII and Appendix A including, at a minimum, a narrative description of activities undertaken; status of Environmental Mitigation Project milestones set forth in Appendix A; and a summary of costs incurred since the previous report.

PINAL COUNTY ROAD PAVING ENVIRONMENTAL MITIGATION PROJECT

To date Asarco has submitted a total of \$6,000,000 to Pinal County for this project. As of June 30, 2018, the County has spent \$5,892,746.85 on the project.

The project was deemed complete by EPA on March 1, 2018 when EPA advised that the \$107,253.15 left over project money would be used for future maintenance of the newly paved Camino Rio Road. Asarco submitted the final project report to EPA on April 12, 2018 and EPA submitted comments on this report to Asarco on May 16, 2018. Asarco incorporated EPA's comments and submitted the revised project report to EPA on May 17, 2018. On June 7, 2018 EPA approved of the revised final project report.

LEAD-BASED PAINT ABATEMENT ENVIRONMENTAL MITIGATION PROJECT

On January 10, 2018 EPA approved of the December 14, 2017 version of the Lead Based Paint Abatement Project Plan. Asarco and CAG established a special escrow account with a bank for this project on April 19, 2018. The \$2 million project funds were transferred into the escrow account on April 20, 2018. CAG has withdrawn \$103,958.90 for the project as of March 31, 2019.

Adams & Wendt continues to conduct lead paint testing at homes and public buildings during the first quarter of 2019. CAG continued to advertise to the Hayden and Winkelmann communities about the project to generate interest and start testing residences including establishing a Facebook page for the project. CAG begun the process to select abatement contractors to use for homes/public buildings that tested positive. See enclosed pdf document titled "Lead Paint Abatement Project Progress Report 1Q2019" for additional details.

55.b Description of any non-compliance with the requirements of this Consent Decree, including those identified in Paragraph 55.a.i and an explanation of the violation's likely cause and the remedial steps taken, to be taken, to prevent or minimize such violation.

None during the first quarter of 2019.

PARAGRAPH 58. REPORT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Joseph A. Wilhelm
General Manager
Hayden Operations

JAW/rcg

Enclosure

Fugitive Dust Plan Inspections Corrective Actions Log
1Q 2019

Date	Form ID	Item Noted	Corrective Action Taken if Necessary
All 1Q 2019	C-04	Missing some curtains at entrances	Curtain material ordered but not received on-site. Replacement curtains will be installed once material received.
1/6/2019 - 2/20/2019	C-04	Dust seal belt worn on the top cover (does not impact the sealing ability of belt seal)	No corrective action needed.
1/7-9/2019	C-04	Some material piles underneath 10 belt	Piles cleaned on 1/9/2019
1/13/2019	C-04	7-3 Conveyor scraper needs to be lowered	Issue repaired prior to next inspection
1/16/2019	C-04	A belt screen on 9 belt needed repair	Issue repaired prior to next inspection
2/3-5/2019	C-04	Some material piles underneath 10 belt	Piles cleaned up by 2/5/2019
2/10/2019	C-04	A belt screen on 9 belt needed repair	Work order generated to repair belt screen
2/23/2019	C-04	Some material piles underneath 10 belt	Piles cleaned up on 2/23/2019
2/27/2019	C-04	Some material piles underneath 10 belt	Piles cleaned up on 2/27/2019
3/6/2019	C-04	Some material piles underneath 10 belt	Piles cleaned up on 3/6/2019
3/21-23/2019	C-04	Some material piles underneath 10 belt	Piles cleaned up on 3/23/2019
3/28-31/2019	C-04	Some material piles underneath 10 belt	Piles cleaned up on 3/31/2019
1/12/2019	C-05	Cattle guards at entrance getting full	Cattle guards cleaned out on 1/12/2019
3/20/2019	C-05	Concentrate storage area's 4" butterfly valve was not opening properly	Maintenance department corrected issue by loosening the valve flange and cutting the valve flange lip.
2/5/2019	C-10	Smelter slag screening area wind fence panels damaged	As soon as damage was discovered a purchase order was generated to have 5D Mining & Construction (wind fence installation contractor) come on-site and repair the damages. All panels repaired on 2/12/2019.
2/20/2019 - 3/3/2019	C-10	Reprocessed Slag Storage Area's sprinklers not operating at full GPM.	Maintenance department found that the main water line to the sprinklers was damaged. Once all the materials needed to repair water line were procured. All of the damaged section of the water line was replaced by 3/3/2019.
1/4-18/2019	C-12	Some missing curtain panels at entrance	Once replacement curtain panels were received on-site they were installed.
1/10/2019	C-12	Water sprays did not turn on and noted that some were leaking	Water sprays were repaired on the same day.

2/16/2019	C-12	Water sprays were not functioning properly	Noted on 2/17/2019 that all sprays were functioning again
1/21/2019	S-02	Water sprays were not functioning properly	Repairs made on same day
All 1Q 2019	S-03	Broken latch on doors to bins #1 &3	Two work orders were generated. Work order #5000043940 was for repairing the bin door hinges and latches and work order #5000043942 was to replace gaskets. Final repairs are pending the receipt of replacement parts.
2/20-21/2019	S-06	Material piles underneath belts	Piles cleaned on 2/20/2019 and 2/21/2019
2/18/2019	S-17	Water line has a leak and needs to be repaired	Leak in water line repaired on 2/18/2019